

## INTERNATIONAL SEARCH REPORT

Int. Application No  
PCT/US2004/034455

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 C07C19/08 C07C17/20 C07C17/21 C07C17/23

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 C07C B01J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BEILSTEIN Data, CHEM ABS Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 763 706 A (TUNG ET AL) 9 June 1998 (1998-06-09) claims 1,24 ----- EP 0 611 744 A (BAYER AG) 24 August 1994 (1994-08-24) the whole document ----- EP 0 442 075 A (BAYER AG) 21 August 1991 (1991-08-21) page 2, line 45 - line 46 page 3, line 13 - line 25 page 4; tables ----- -/-	1 1 1

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

## \* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*&\* document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
25 February 2005	09/03/2005
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer  Kardinal, S

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US2004/034455

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 98/10862 A (IMPERIAL CHEMICAL INDUSTRIES PLC; SCOTT, JOHN, DAVID; WATSON, MICHAEL,) 19 March 1998 (1998-03-19) page 1, line 9 - line 13 page 2, line 4 - page 4, line 6 page 7, line 25 - line 30 examples	1
A	EP 0 657 408 A (ELF ATOCHEM S.A) 14 June 1995 (1995-06-14) page 2, line 1 - line 3 page 6-8, catalyst 11	1
A	EP 0 502 605 A (IMPERIAL CHEMICAL INDUSTRIES PLC) 9 September 1992 (1992-09-09) the whole document	1

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No  
PCT/US2004/034455

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 5763706	A	09-06-1998	WO	9800378 A1	08-01-1998
EP 0611744	A	24-08-1994	DE	4305164 A1	25-08-1994
			BR	9400604 A	23-08-1994
			DE	59401009 D1	19-12-1996
			EP	0611744 A1	24-08-1994
			ES	2093458 T3	16-12-1996
			JP	6256235 A	13-09-1994
			MX	9401224 A1	31-08-1994
EP 0442075	A	21-08-1991	DE	4004495 A1	22-08-1991
			CA	2036220 A1	15-08-1991
			DE	59002322 D1	16-09-1993
			EP	0442075 A1	21-08-1991
			ES	2044382 T3	01-01-1994
			JP	2672191 B2	05-11-1997
			JP	4211027 A	03-08-1992
			US	5171901 A	15-12-1992
WO 9810862	A	19-03-1998	CA	2263711 A1	19-03-1998
			EP	0925112 A1	30-06-1999
			WO	9810862 A1	19-03-1998
			JP	2001500059 T	09-01-2001
			US	2001011061 A1	02-08-2001
EP 0657408	A	14-06-1995	FR	2713633 A1	16-06-1995
			AU	8034094 A	15-06-1995
			CA	2136938 A1	10-06-1995
			CN	1107827 A	06-09-1995
			DE	69406525 D1	04-12-1997
			DE	69406525 T2	07-05-1998
			EP	0657408 A1	14-06-1995
			ES	2110201 T3	01-02-1998
			GR	3025863 T3	30-04-1998
			JP	7206728 A	08-08-1995
EP 0502605	A	09-09-1992	AT	140399 T	15-08-1996
			AU	658161 B2	06-04-1995
			AU	1032492 A	10-09-1992
			BR	9200361 A	10-11-1992
			CA	2059983 A1	08-09-1992
			CN	1064628 A	23-09-1992
			CN	1130615 A ,C	11-09-1996
			CS	9200171 A3	16-09-1992
			DE	69212183 D1	22-08-1996
			DE	69212183 T2	05-12-1996
			DK	502605 T3	28-10-1996
			EP	1350564 A1	08-10-2003
			EP	0502605 A1	09-09-1992
			EP	0666105 A2	09-08-1995
			ES	2089381 T3	01-10-1996
			FI	920273 A	08-09-1992
			GR	3020970 T3	31-12-1996
			HU	63825 A2	28-10-1993
			IE	920163 A1	09-09-1992
			IN	185352 A1	06-01-2001
			JP	5220400 A	31-08-1993
			KR	217353 B1	01-09-1999

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US2004/034455

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0502605	A	MX 9200998 A1	01-09-1992
		NO 920299 A	08-09-1992
		PL 293283 A1	05-10-1992
		SG 50565 A1	20-07-1998
		RU 2032464 C1	10-04-1995
		US 5449656 A	12-09-1995
		US 5623092 A	22-04-1997
		US 5281568 A	25-01-1994
		ZA 9200396 A	25-11-1992